



TRELLEBORG



THE WORLDWIDE DIVING STANDARD



## THE WORLDWIDE DIVING STANDARD

Having the right attitude to what professional diving is all about is a prerequisite for every person involved. That goes, not least, for the divers' employers as they have the final responsibility for the safety of their divers.

Diving is a hazardous occupation. That is why safety always has been the most important issue for us at Trelleborg Protective Products when designing and producing Viking diving suits. But isn't functionality as important? Of course, we see functionality as the most important aspect of safety. A diving suit that works the way it should is perhaps the best safety assurance the professional diver can get.

However we never forget that diving is also an exciting activity that brings joy to many people worldwide – both professional and recreational divers. To them, the experience is the big issue. But of course, neither of them is willing to take unnecessary risks.

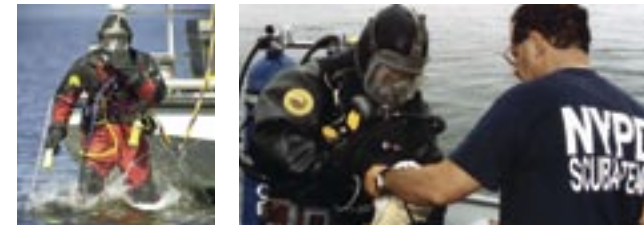
Providing recreational and sport divers all around the world with diving suits, that are perfectly adapted to their purpose, is our other passion. Suits that give everybody, even the beginner, a special feeling of control and safety that makes every dive just as fantastic – or as undramatic – as expected.

It is this attitude, and of course our diving suits in themselves, that has made Viking the world's leading brand for all diving purposes. In fact, we like to think of it as a standard.

The worldwide diving standard.

### REFERENCES

The Worldwide Diving Standard



#### Fire & Rescue

New York City Fire Dept, USA • Lake George Fire Dept (New York State), USA • Los Angeles City Fire Dept (California), USA • Los Angeles County Fire Dept #181 (California), USA • Long Beach Fire/Life Guard (California), USA • Huntington Beach Fire Dept (California), USA • Anne Arundel County Fire Dept (Maryland), USA • Miami Fire Dept (Florida), USA • Tallahassee Fire Dept (Florida), USA • Orlando Fire Dept (Florida), USA • Las Vegas Fire Dept (Nevada), USA • Nashville Fire Dept (Tennessee), USA • Boston Fire Dept (Massachusetts), USA • Chicago Fire Dept (Illinois), USA • Stockholm Fire Dept, Sweden • Malmö Fire Dept, Sweden • Gothenburg Rescue Service, Sweden • Trondheim Fire Dept, Norway • Fredrikstad Fire Dept, Norway • Kristiansand Fire Dept, Norway • Oslo Fire Dept, Norway • Ålesund Fire Dept, Norway • Bergen Fire Dept, Norway • Førde Fire Dept, Norway • Rotterdam Fire Dept, Netherlands • Amsterdam Fire Dept, Netherlands • Brandweer Roermond, Netherlands • Brandweer Breda, Netherlands • Brandweer Dordrecht, Netherlands • Brandweer Nijmegen, Netherlands • Brussels Fire Dept, Belgium • Mechelen Fire Dept, Belgium • Antwerp Fire Dept, Belgium • Moscow Rescue Diving Services, Russia • State Fire & Rescue Dept, Latvia • Madrid Council, Spain • Italy Fire and Rescue Services • Rome Fire Dept, Italy • Tokyo Fire Dept, Diving Rescue Section, Japan • Hong Kong Fire Services Dept, China • Airport Emergency Services, Singapore • Seoul Metropolitan Fire and Disaster Management Dept, South Korea • Water Rescue 119, South Korea • National Fire & Rescue Administration (BOMBA), Malaysia • Ahmedabad Fire & Rescue Services, India • Jamnagar F.B., Gujarat, India

#### Military

Army Special Forces, USA • US Navy EOD • Canadian Navy • Swedish Armed Forces - Naval Diving School • Clearance Divers, Sweden • SWEDEC (Swedish EOD and Demining Centre) • Royal Danish Navy • Royal Norwegian Navy Material Command • KNM Tordenskjold, Military Dive School, Norway • Royal Dutch Navy, Netherlands • Royal Dutch Army, Netherlands • Belgium Navy EOD • German Navy • Italian Navy • French Navy • British Royal Navy • Polish Navy • Special Forces Unit, Latvia • Japan Maritime Self Defence Force • Maritime Safety Board, Japan • South Korean Navy • Taiwan Navy Rescue Team, Taiwan R.O.C. • New Zealand Navy • Russian Navy • Russian MoD • Ministry of Defence (Hellenic Navy Seals), Greece

#### Law Enforcement

Boston Police Dept (Massachusetts), USA • Massachusetts State Police, USA • New Hampshire State Police HQ, USA • New Jersey Division of State Police HQ, USA • New York City Police Dept, USA • Detroit Police Underwater Recovery Team (Michigan), USA • Michigan State Police HQ, USA • Los Angeles County Sheriff's Dept (California), USA • Maine State Police, USA • Indiana State Police, USA • Toronto Police Dept, Canada • Royal Canadian Mounted Police (Ontario), Canada • Ontario Provincial Police, Canada • The National Counter Terrorist Unit, Sweden • KLPD (The National Police Agency), Netherlands • Australian Police Rescue Divers • New Zealand Police • Japan Police HQ (all cities) • Aichi Police Agency, Japan • Nagoya Police Agency, Japan

#### Commercial

Buffalo Industrial Diving (New York State), USA • Dyk & Sjöttjänst AB, Sweden • Frog Dyk AB, Sweden • Bergen University, Commercial Diving Program, Norway • Norwegian School of Commercial Diving • Skanska AS, Norway • Veidekke AS, Norway • Proff Dykk AS, Norway • Technip Offshore AS, Norway • Olav Erik Hagen AS, Norway • West Dykkerservice AS, Norway • Falck Dykkertjeneste AS, Norway • Smit, Netherlands • Svitser Wijsmuller, Netherlands

#### Other

Federal Bureau of Investigation (New York), USA • Missouri State Water Patrol, USA • Swedish Coast Guard • Sydney Olympic 2000 Safety Committee, Australia • Russian Ministry of Emergency Management • Russian Ministry of Interior • Federal Security Service, Russia • Ministry of Mercantile Marine, Greece • Greek Ministry of Culture

HDS 1000  
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HDS 1500  
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HDS DIVERS DRESS  
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PRO 1000  
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HD 1500  
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DIVERS DRESS  
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COMBAT BE  
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PROTECH FE  
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X-TREME BE



## Viking Diving Equipment

Our range of products has been developed to provide personal protection whilst underwater. With dedication to research, quality control and exhaustive field-testing, the Viking brand is a leading provider of products for diving in hazardous conditions.

**VIKING**  
THE WORLDWIDE  
DIVING STANDARD



**Viking HDS  
General Specifications**

- Vulcanized rubber dry suit made of NITECS - new and extremely durable rubber material from Trelleborg (US pat. pend.)
- Complete suit including all rubber components are made of NITECS material
- Material weight is 1050 g/m<sup>2</sup>
- High protection index against petroleum based chemicals and extremely good chemical permeation data
- Fitted with Viking Hazmat inlet valve and Viking X2 outlet valve

- Gas and watertight heavy-duty chloroprene zipper across the shoulders
- NITECS reinforced boots
- Integrated suspenders for ease of wear
- Certified according to EN 14225-2, including the optional chemical protection requirements
- Suit comes delivered in a bag including repair kit, zip care tools, inflator hose and user manual

**HDS 1000**

- NITECS material offers 5x the abrasion resistance of Viking Pro 1000

- Patterns and sizes acc. to Viking Pro 1000 – 10 sizes: 00–05 and 01Wide–04Wide

- Black NITECS reinforcements from the foot over the knee to the seat, across shoulders and down on arms and in crotch area

- NITECS accessories include Magnum HDS hood and HDS sleeve rings

**HDS 1500**

- NITECS material offers 4x the abrasion resistance of Viking HD 1500

- Patterns and sizes acc. to Viking HD 1500 – 8 sizes: 01–04 and 01Wide–04Wide



PRO 1000 BLACK

- Black NITECS reinforcements from the foot over the knee, across shoulders and down on arms and in crotch area
- NITECS accessories include all Viking yokes, Magnum HDS hood and HDS sleeve rings

**HDS Divers Dress**

- NITECS material offers 4x the abrasion resistance of Viking Divers Dress

- Patterns and sizes acc. to Viking Divers Dress - 4 sizes: 01–04

- Black NITECS reinforcements from the foot up over the knee, on lower arms and in crotch area

- Rubber collar options include Siebe Gorman 12-bolt, Desco 12-bolt and Dräger 12-bolt Collars
- Without zipper and valves

**General Specifications  
Pro 1000 | HD 1500**

- Vulcanized rubber dry suit made of red or black EPDM/natural rubber with a two-way stretch polyester lining
- Fitted with rotating inlet and exhaust valves
- Gas- and watertight heavy-duty chloroprene zipper across the shoulders

- Integrated suspenders for ease-of-wear
- Wide range of accessories; various cuff ring systems, different pockets, relief zip, neoprene or safety boots
- Suit comes delivered in a bag including repair kit, zip care tools, inflator hose and user manual

**Pro 1000**

- Material weight is 1050 g/m<sup>2</sup>
- Available in 10 sizes: 00–05 and 01Wide–04Wide
- Black rubber reinforcements from the foot over the knee to the seat, across shoulders and down on arms and in crotch area
- Reinforced rubber boots



HD 1500 BLACK



DIVERS DRESS BLACK

- the knee to the seat, across shoulders and down on arms and in crotch area

- Reinforced rubber boots fitted with fin-strap holders

**HD 1500**

- Material weight is 1550 g/m<sup>2</sup>
- Available in 8 sizes: 01–04 and 01Wide–04Wide
- Black rubber reinforcements from the foot up over the knee, across shoulders and down on arms and in crotch area
- Reinforced rubber boots

**Divers Dress**

- Material weight is 1550 g/m<sup>2</sup>
- Available in 4 sizes: 01–04
- Soft boots on the suit for easy fit of heavy lead boots
- Siebe Gorman, Desco and Dräger 12-bolt collars available
- Without zipper and valves
- Suit comes delivered in a bag including repair kit and user manual

**Combat | ProTech**

- Vulcanized rubber dry suit made of black EPDM/natural rubber. Very flexible polyamide/elastane lining for maximum mobility and comfort
- Material weight is 1250 g/m<sup>2</sup>
- Available in 10 sizes: 00–05 and 01Wide–04Wide
- Black rubber reinforcements from the foot over the knee to the seat, across shoulders and down on arms and in crotch area
- Fitted with rotating inlet and exhaust valves



X-TREME BE BLACK

- Gas- and watertight medium-duty chloroprene zipper
- Available in Back Entry and Front Entry versions
- Rubber coated neoprene boots with fin-strap holders
- Integrated suspenders for ease-of-wear
- Wide range of accessories; various cuff ring systems, different pockets and relief zip
- Suit comes delivered in a bag including repair kit, zip care tools, inflator hose and user manual

**X-treme**

- Made of all Black or Blue/Black polyurethane material
- Material weight is 474 g/m<sup>2</sup>
- Very strong welded seams
- Available in 10 sizes: 00–04 and 00Wide–04Wide
- PU-reinforcements covering the knees
- Fitted with rotating inlet and exhaust valves
- Welded PU-zipper
- Available in Back Entry and Front Entry versions

- Rubber coated neoprene boots with fin-strap holders
- Integrated suspenders for ease-of-wear
- Suit comes delivered in a bag including repair kit, zip care tools, inflator hose and user manual



Hoods



### Hoods

- 1 NAUTIC NEOPRENE HOOD**  
A standard neoprene hood permanently attached to the suit with a reflective yellow Viking logo on top of the head. **Sizes:** Medium and Large.
- 2 SMOOTH SKIN NEOPRENE HOOD**  
Made of soft smooth skin neoprene, i.e. no fabric on outside. The hood is very easy to decontaminate after exposure to pollutants. **Sizes:** Small, Medium, Large and X-Large.
- 3 SURVEYOR LATEX HOOD**  
A standard latex hood permanently attached to the suit. The neck seal is mounted to the suit directly under the hood. **Sizes:** Small and Standard.
- 4 MAGNUM RUBBER HOOD**  
Regular hood model made of Pro 1000 material. Velcro® strap for optimized fit. **Colors:** Red and Black. **Sizes:** Medium, Large, X-Large.
- MAGNUM FLEX RUBBER HOOD (no image)**  
Same as the Magnum rubber hood, but made of flexible and stretchy Combat/ProTech fabric. Velcro® strap for optimized fit. **Color:** Black. **Sizes:** Medium, Large, X-Large.
- 6 TURBO RUBBER HOOD**  
Made of Pro 1000 material with integrated latex inner hood and neck seal. Velcro® strap for optimized fit. **Colors:** Red and Black. **Sizes:** Medium, Large, X-Large.
- 7 SEPARATE NEOPRENE HOOD**  
A reflective yellow Viking logo on top of the head. Velcro® on the side of the neck for optimized fit. **Sizes:** Small, Medium, Large

### Yokes & Collars

- 1 SUPERLITE 27**  
Rubber yoke without integrated neck seal (neck seal bought separately). Fits helmet models 17C, 17K, KM37 and higher. **Colors:** Red and Black.
- 2 SUPERLITE 17**  
Rubber yoke with integrated latex neck seal. Fits helmet models 17A and 17B. **Colors:** Red and Black.
- 3 DESCO**  
Rubber yoke without integrated neck seal. **Colors:** Red and Black.
- 4 AQUADYNE AH3**  
Rubber yoke without integrated neck seal. Available with or without drop collar. Also for AH5 helmets. **Colors:** Red and Black.
- 5 DRÄGER**  
Rubber yoke without integrated neck seal. **Colors:** Red and Black.
- 6 GENESIS**  
Rubber yoke with integrated neoprene neck seal. **Colors:** Red and Black.

- 7 GORSKI**  
Rubber yoke without integrated neck seal (neck seal bought separately). **Colors:** Red and Black.
- Yokes also available (no image):** Miller 200 (300+400), Comex, MKXII.

Yokes & Collars



Yokes & Collars



Valves & Hoses



- SIEBE GORMAN 12-BOLT COLLAR (no image)**  
Rubber collar for the Siebe Gorman 12-bolt helmet. Fits the Divers Dress suit. **Rubber collars also available (no image):** Desco 12-bolt, Dräger 12-bolt

### Valves & Hoses

- 1 INLET VALVE – STANDARD**  
360° swiveling valve with airflow of 80 liters/ min. Also available in non-magnetic version fulfilling the requirements of STANAG EOD operations.
- 2 INLET VALVE – HAZMAT**  
Made for contaminated water diving. Equipped with extra slide valve to enable the diver to shut off the airflow in an emergency situation without risking leakage. Valve is 360° swiveling. Max airflow 80 liters/min, min airflow 0 liters/min. Available in non-magnetic version.
- 3 INLET VALVE - PUSH PROTECTED**  
Lowered inflation button to prevent accidental inflation by equipment straps etc. 360° swiveling, airflow of 80 liters/min.
- 4 INLET VALVE - LOW ACOUSTIC**  
Same design as Hazmat Inlet Valve, but with different slide valve settings; max airflow 80 liters/ min, min airflow 20 liters/min, resulting in lower acoustic profile. Intended for military use and only available in non-magnetic version.
- 6 OUTLET VALVE - X2**  
Developed for contaminated water diving. Equipped with double check valves to minimize risk of micro leakage. Available in non-magnetic all Black version.
- 7 OUTLET VALVE - LOW PROFILE**  
Equipped with rotating valve cap for easy adjustment of outgoing airflow and controlled buoyancy. Available in non-magnetic version.
- 7 OUTLET VALVE - STANDARD**  
Equipped with rotating valve cap for easy adjustment of outgoing airflow and controlled buoyancy. Available in non-magnetic version.
- 8 BLANK PLUG**  
To be mounted directly onto the valve plate when valve is dismantled used or needed, for instance with Free Flow helmets.
- 9 CHEMICAL PROTECTION PAD**  
For mounting on the inside of the suit directly attached to the valve. Outer shield made of Viton®/ Butyl rubber with an inner bag containing a chemical absorbent.
- 10 HOSES FOR INLET VALVES**  
Low pressure hose, length 75 cm/30 inches (included with every Viking suit). Available in non-magnetic version.

### Undergarments

- 1 ARCTIC PLUS (next page)**  
Full-body undergarment for cold and/or very cold waters. Outer layer made of Supplex®, inter lining consisting of Thinsulate B400, and liner made of Polartec® fleece. **Colors:** Red/Black, all Black. **Sizes:** 00–05

## Undergarments



## COMFORT PLUS

Full-body undergarment for medium temperate and/or cold waters. Outer layer made of Supplex®, inter lining consisting of Thinsulate B200, and liner made of Polartec® fleece. **Colors:** Red/Black, all Black. **Sizes:** 00-05

## ODEN

Full-body undergarment for temperate and/or medium temperate waters. Outer layer made of Supplex® with a liner of Polartec® fleece. **Color:** Red/Black. **Sizes:** 00-05

## WOOLLEN TERRY

Super hygienic full-body undergarment. 60/40 wool/polyester. Garment worn closest to body for absorption of moisture and perspiration. **Sizes:** Small, Medium, Large, X-large

## ARCTIC PLUS BOOTIE

Boot to complement Oden, Comfort Plus and Arctic Plus undergarments. Outer layer made of Supplex®, inter lining consisting of Thinsulate B400, and liner made of Polartec® fleece. **Color:** Black. **Sizes:** 00-05

## COOLING VEST

Phase Change Material (PCM) elements absorb body heat and thereby create a cooling effect. Easy re-charge in room temperature. **Color:** Black. **Sizes:** S-M, L-XL, XXL-XXXL.

## Miscellaneous

## NEOPRENE BOOT

A very comfortable rubber coated neoprene boot with fin-strap retainer on the heel to prevent fins sliding off. **7 sizes.**

## SAFETY BOOT

Rubber safety boot with steel toe cap and nail protection. **7 sizes.**

## SLEEVE RING KIT

Rugged rubber rings to facilitate use of dry gloves. Rings can either be glued onto the sleeve or attached directly onto the latex cuff. Versions available both for Viking HDS and regular rubber material. **One size.**

## BAYONET GLOVE SYSTEM

A quick-connect glove system for easy donning of dry gloves. Main ring is either glued directly onto the sleeve or attached directly onto the latex cuff. Package includes all necessary rings along with 5-finger latex gloves. **Sizes:** Medium, Large.

## LEG WEIGHT HOLDER

Weight holders in rugged rubber material with five weight pockets each, holding a maximum of 10 x 500 grams. **Color:** Black

## CARGO POCKET

Rubber pocket with quick release buckles. **Colors:** Red and Black.

## KNIFE POCKET

Rubber pocket for diving knife, eliminates the need for straps. **Colors:** Red and Black.

## CYLINDER POCKET

Rubber pocket for small pony bottle/cylinder air tank. **Color:** Black

## Miscellaneous



## Rubber and Vulcanization

## DIFFERENT TYPES OF RUBBER - DIFFERENT PROPERTIES

Rubber is divided into two large groups; natural rubber and synthetic rubber. Natural rubber comes from the rubber tree *Hevea Brasiliensis*, which mainly grows in Indonesia, Thailand and Malaysia. The rubber latex is collected from the tree and dried to form rubber sheets. Natural rubber is known for its high elasticity and outstanding abrasion resistance. Due to these properties its main use is in rubber tires and conveyor belts. However, Viking suit material also includes a portion of natural rubber.

Synthetic rubber is man-made in large factories, where the raw material comes from the oil industry, for example methane and propane. By combining these chemicals with others like chlorine and fluorine, you can synthesize, or "build" exactly the material/molecules you like with the specific properties you need. Examples of synthetic rubber types are chloroprene rubber (Neoprene), fluoro rubber (Viton®) and nitrile rubber.

Synthetic rubber is used in a variety of different products, since you can find more or less the exact properties you need for your specific product, for example hoses, flooring, o-rings and window seals. By combining natural rubber and synthetic rubber, the range of different properties can be varied even more.

## MANUFACTURING RUBBER PRODUCTS

Even though the rubber type determines the major properties of the product, chemicals are needed to design the final properties. A recipe for making rubber products includes 10 to 15 different chemicals, the rubber included. Examples of chemicals used are oil, clay, antioxidants, antiozonants, pigments, flame retardants and different vulcanizing chemicals.

## VULCANIZATION

Charles Nelson Goodyear discovered the vulcanization process of rubber in 1839. Without vulcanization rubber is tacky and the strength is poor, basically of no practical use at all. Thanks to Goodyear we today have an enormous range of useful rubber products around us! Vulcanization is a type of curing process, where the rubber molecules are bonded together - cross linked - into a three-dimensional network. This is a chemical reaction/process which is triggered by high temperatures (around 150-250°C) in combination with the vulcanizing chemicals. The network that is created in the vulcanization process gives the strength and elasticity which is so special and unique to rubber.

## RUBBER FOR VIKING DRY SUITS

The well-known Viking suits Pro 1000, HD 1500 and ProTech/Combat are all made of the same rubber compound, a blend of un-vulcanized natural rubber (NR) and synthetic EPDM rubber. This compound is very suitable for many reasons; it keeps its qualities as an uncured product very well, and after vulcanization it gives a very broad and generally high protection index against many different chemicals as well as abrasion, but above all, EPDM has outstanding heat, ozone and weather resistance. In short, an excellent material for most professional diving suit requirements.

The Viking HDS line of suits is made of NITECS™, a US patent pending rubber material developed by the Trelleborg Group. NITECS™ is specifically developed to withstand petroleum based chemicals (diesel, aviation fuels etc.), which NR/EPDM is relatively weak against. As such, it provides the Viking HDS unsurpassed protection against chemical permeation along with extreme durability against wear-and-tear. With NITECS™ material, Viking HDS suits considerably raise the safety level of contaminated water diving.



## Contaminated Water

**⚠ Warning! Diving in Contaminated Water is extremely hazardous and requires special training.**

Sadly, there is no arguing the fact that there are thousands and yet thousands of hazardous substances available worldwide today. For most of these, far too little is known about the effects on human beings resulting from skin contact. Chemical protective clothing has the obvious purpose of protecting the wearer from direct contact with hazardous substances in all of their various forms. But you don't have to be a fire fighter or any other kind of emergency responder to risk encounters of this sort. A professional diver has to deal with basically all chemical substances existing on land, since everything can and probably eventually will, end up in the water.

Therefore there is a definite need within the professional diving community to have access to performance requirements for equipment used to protect divers required to enter both chemically and biologically contaminated water. Trelleborg Protective Products has developed a test matrix to quantify the performance of the Viking dry diving suits for use in these kinds of waters. In lieu of defined acceptable standards within the diving community, we have taken the National Fire Protection Association (NFPA) standards for chemical protective clothing and modified it to test dry diving suits. The NFPA standard provides the benchmark performance criteria to approve suits for first responders entering unknown hazardous chemical environments.

In the report *Diving in Contaminated Water – Chemical and Biological Tests of Viking Dry Suits and Accessories*, which is available via the Viking website, we provide the information needed to make informed decisions and thereby ensure protection of the diver in contaminated waters. The information in the report does not provide all the information or training needed to plan a dive operation in contaminated water. It is ultimately the diving supervisor who must take responsibility for the safety of the diver based on a

risk assessment of the actual conditions at the dive site. And in certain circumstances, the best decision may be not to dive at all.

### AFTER DIVING – DECONTAMINATION

Decontamination shall be performed on the scene when a dry suit has been exposed to, or has potentially been exposed to, hazardous materials. On-scene decontamination shall be performed while the suit is still being worn to minimize potential contamination of the wearer during removal.

Due to the vast number of chemicals and their different properties, no guaranteed decontamination procedure exists. The best way to decontaminate must be decided for the specific chemical encountered. This decision may only be made by people educated for this task and with a good working knowledge of chemistry.

In the absence of such knowledge, the minimum decontamination shall consist of rinsing or spraying the dry suit with water and scrubbing lightly with a soft bristled brush using a decon detergent, e.g. Simple Green, and then thoroughly rinsing with plain water. This process shall be repeated at least twice.

The health and safety of the diver, both during and after the decontamination process, and the health and safety of the personnel applying the decontamination agent, must be taken into consideration. After removal, the dry suit must be placed in a suitable container for subsequent cleaning, additional decontamination, inspection, or in the worst case, disposal.

### ⚠ WARNING

Damage of diving equipment due to exposure to contaminants cannot always be identified by visual inspection. Caution must always be used before reusing equipment that has previously been exposed to chemical environments.

# 1

**RESCUE**  
Rome Fire Brigade, Italy

The Rome Fire Brigade has a very sophisticated diving unit which has to deal with all kinds of scenarios and environments on a regular basis. Here on location in the Tiber River in central Rome, they are diving a completely encapsulated system consisting of Viking HD 1500 suits, dry gloves and demand diving helmets on a surface supplied system.



# 2

**COMMERCIAL**  
Nautilus s.r.l., Venice, Italy

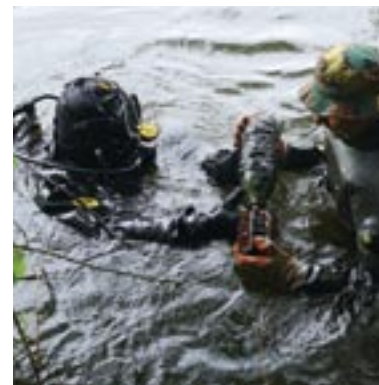
Nautilus s.r.l. of Venice is doing commercial diving assignments all year round and Viking dry suits are their preferred choice. Doing a job in the Venice lagoon they use Viking HDS 1000 suits with full-face masks, dry gloves and regular tanks. Also dive tenders are equipped with Trelchem® splash suits for protection against pollutants.



# 3

**MILITARY**  
Belgium Navy EOD

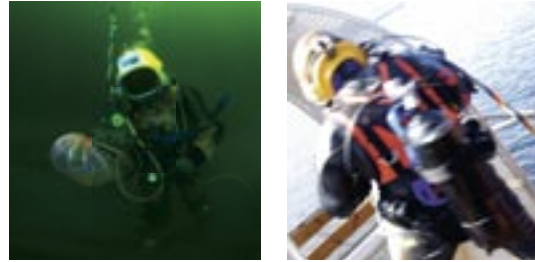
The Belgium Navy EOD (Explosive Ordnance Disposal) team deals with potentially deadly situations on a daily basis recovering and disarming grenades and mortars from both world wars all over Belgium. They are using Viking Pro 1000/HDS 1000 suits with full-face masks to get the job done in a safe and efficient way while staying both dry and protected.



# 4

**COMMERCIAL TRAINING**  
INPP Marseille, France

The INPP diving school in Marseille is one of the leading commercial diver training facilities in Europe. For dry suit training, Viking HDS 1500 Free Flow suits are used together with dry gloves and a Free Flow helmet system in combination with surface supplied air.



## Trelleborg Protective Products

**It's no wonder that we care so much about protection at Trelleborg Protective Products – it's our middle name.**

Trelleborg Protective Products is one of the world's leading producers of protective clothing and related products. Through world renowned brand names like Viking, Trellechem® and TrelTent®, Trelleborg Protective Products develops and manufactures dry diving suits, chemical protective suits, inflatable shelters and a wide range of custom-made products such as shower mattresses for the medical care industry, dunnage bags for transportation and shipping, and dock seals.

Our protection concept is fundamental in practically all these products. But how the concept is realized varies from business to business, from product to product and – most important – from customer to customer.

We know that our ability to adapt to user requirements is vital to our customers. A good example of this is our range of Viking diving suits. From ten basic models we have manufactured and delivered more than a quarter of a million different suits!

Through the years and from daily work with protective rubber products of all kinds, it could indeed be said that we know how to protect our customers.

Trelleborg Protective Products employs 220 people and has offices in UK, Norway, USA, Singapore, Lithuania and the Russian Federation and with headquarters located in Trelleborg, Sweden.

### QUALITY

Trelleborg Protective Products has a quality management system that fulfils the requirements of ISO 9001 with respect to manufacturing of personal protective equipment, as well as other products based on polymer/textile materials.

### ENVIRONMENT

Our objective is to develop, manufacture and market polymer safety products. The main purpose of our products is to protect and to minimize the risk of damage to both man and environment. Our products shall not cause environmental damage. All our efforts are summarized in our Environmental Policy.

### HISTORY

**From producing raincoats to setting safety standards.**

As part of the global industrial group Trelleborg, Trelleborg Protective Products draws from over 100 years of profound knowledge and competence within the polymer materials field and related areas of application.

And although raincoats were among the first protective products produced in 1910, Trelleborg Rubber Factory as the name was back then, made the first diving suits of rubber fabric in 1914. Chemical protective suits followed later in the 1930's.

Today, Trelleborg Protective Products is relied on to provide personal protection for professionals in hazardous working conditions all around the world.

## Trelleborg Group

Trelleborg Protective Products is one of the companies in the Trelleborg Group, a global engineering Group whose leading positions are based on advanced polymer technology and in-depth applications know-how. The Trelleborg Group develops high-performance solutions that seal, damp and protect in demanding industrial environments

Trelleborg AB was founded in 1905 and its Headquarters are located in Trelleborg, Sweden. In 2007, the Group employed about 25,000 people and has operations in about 40 countries. Net sales amounted to EUR 3,297 M (SEK 30,971 M).

## European Standard for Diving Suits

In February of 2005 CEN approved and issued the European standard for diving suits, EN 14225. The standard is divided into four separate documents covering:

Wetsuits	14225-1
Dry Suits	14225-2
Actively Heated or Cooled Suits/Systems	14225-3
One Atmosphere Suits (ADS)	14225-4





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